DOCUMENT RESUME

ED 054 956 SE 012 416

TITLE Environmental Study Area Prototype, Idea Sketch No. 4.

INSTITUTION Pueblo Regional Planning Commission, Colo.

PUB DATE Apr 71

NOTE 5p.

EDRS PRICE MF-$0.65 HC-$3.29

DESCRIPTORS Educational Programs; *Environmental Education; *Interdisciplinary Approach; Landscaping; School Environment; *School Planning; Site Development; *Study Centers

IDENTIFIERS Pueblo (Colorado)

ABSTRACT

Development of an environmental study area in conjunction with a school landscaping project is outlined in this model. The Pueblo (Colorado) Regional Planning Commission and the Pueblo Beautiful Association determined the need for landscaping school grounds. Together with a school district committee of teachers and community leaders interested in the educational possibilities of the outdoor environment, a plan was drawn up incorporating environmental learning and landscape improvement. An interdisciplinary approach was advocated in employing the school site as a teaching aid. Procedures in plan development and implementation are enumerated in this prototype. Also included are sketch plans for an outdoor classroom, surrounded by areas for arid, semi-arid, foothill, and mountain plant life, rocks, and soils. Ultimately, the goal is enrichment of the learning process for elementary, junior high, and senior high school students and beautification of the urban environment in Pueblo. (BL)

ED054956

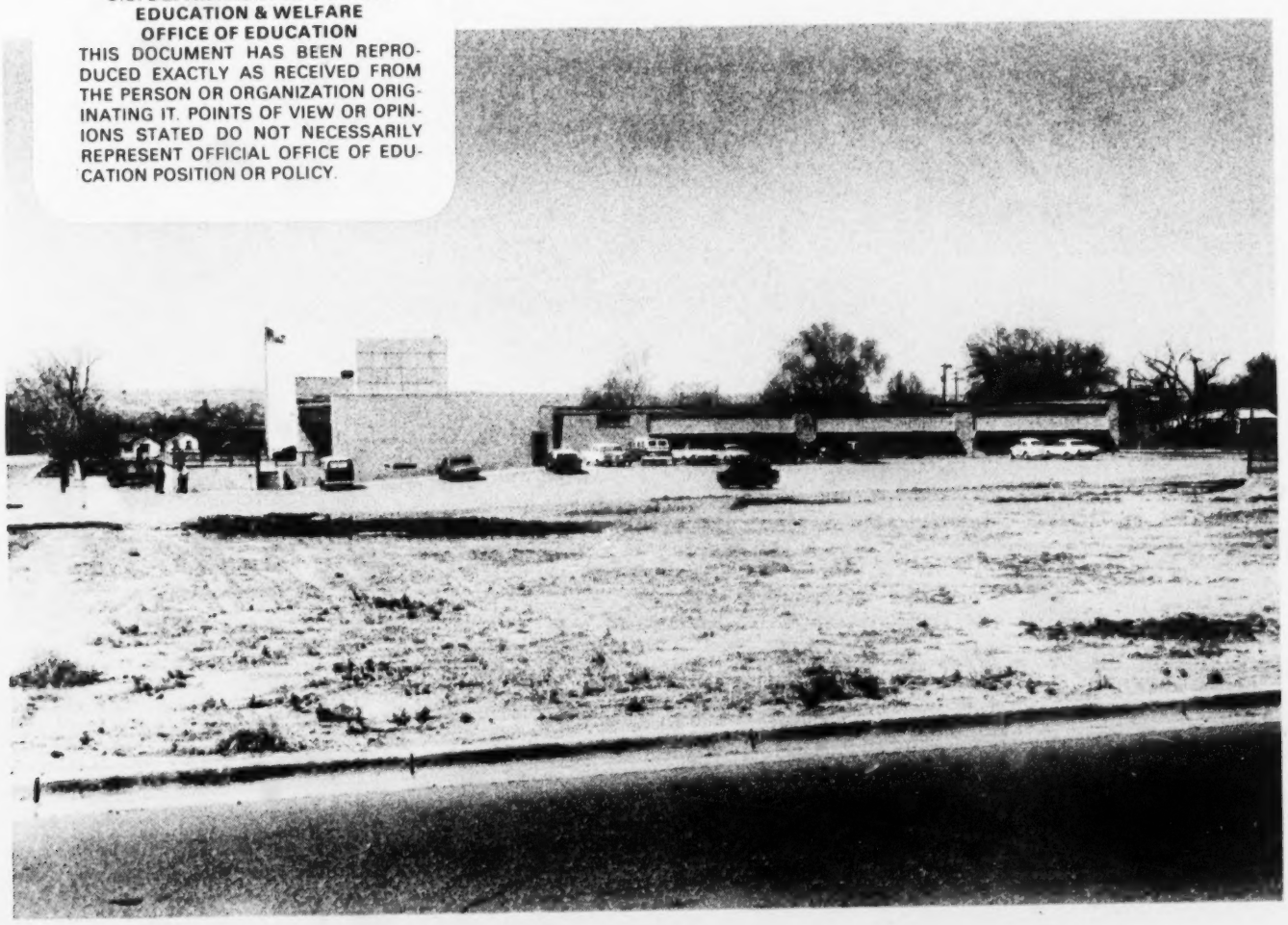
U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

EXHIBIT A

PUEBLO REGIONAL PLANNING COMMISSION

ENVIRONMENTAL STUDY AREA PROTOTYPE

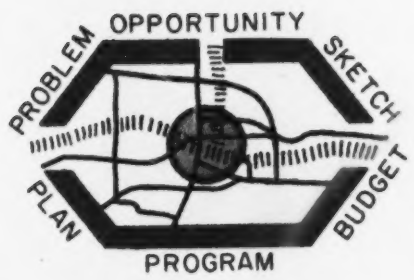
IDEA SKETCH NO. 4



An increasingly important course of study is man's relationship, interaction, and interdependence with his physical environment. The process of environmental "learning" may appear under many guises. The outdoor opportunities for teaching the sciences, mathematics, the arts, etc., in the public schools may occur naturally on some sites; on others these opportunities must be provided. To landscape an area as a means to urban beauty eliminates a particular problem. An unmet opportunity is identified and fulfilled if provisions are made as well for outdoor environmental education, thus creating an awareness of man and his environment. The inquisitive learning process can become a positive search in an exciting, pleasant environment rather than a negative escape from the neutral phenomena of institutional buildings.

Beauty from landscaping and learning from environmental designs together make a new and exciting visual study opportunity for Pueblo's children.

SE 012 416



PUEBLO REGIONAL PLANNING COMMISSION

ENVIRONMENTAL STUDY AREA PROTOTYPE

IDEA SKETCH NO. **4**

PURPOSE:
(the reason for which something is done)

To eliminate the visual blight of raw, featureless school yards and to provide an unmet opportunity for varied educational experiences.

GOAL:
(the something that effort is intended to obtain)

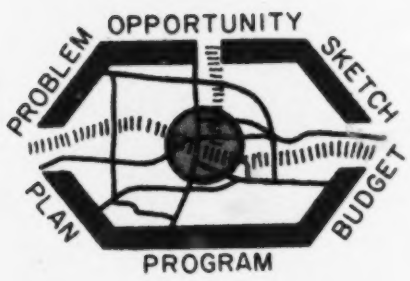
Enrichment of the learning process for elementary, junior high, and high school children and beautification of the urban environment in Pueblo.

OBJECTIVES:
(the results toward which effort is directed)

1) To establish outdoor environmental learning labs at each local school
2) To landscape each school ground
3) To reduce air pollution from dust
4) To give teachers options for instructional technique
5) To make all school grounds attractive for a full range of school-day and after-hours recreation

PROGRAM:
(means to obtain the results)

1) A policy decision that all school grounds are parks and should be made park-like during the next five years for varied outdoor education experiences
2) A policy decision that all school grounds are entitled to the same public water that is provided to parks
3) Outdoor teaching aids, such as sundials, compasses, varied plant life, weather stations, etc., are eligible scholastic expenses within the training aid material budget
4) Students, parents, and teachers can all help build, improve and maintain the outdoor education centers
5) Full use of potentially available funds from PTA organizations, service clubs, Pueblo Beautiful Association, private business, and school children's drives.



PUEBLO REGIONAL PLANNING COMMISSION

ENVIRONMENTAL STUDY AREA PROTOTYPE

IDEA SKETCH NO. 4

POSSIBILITIES OF OUTDOOR EDUCATION

A draft report of a guide to the possibilities of employing the school site as a teaching aid was prepared by Edward E. Lane, Principal of Irving School, and Robert F. Moore, Chairman, Outdoor Education Committee of School District 60.

Included among the many possibilities with the field of mathematics were measurement, geometry, statistics, graphs and estimating. Rudimentary survey techniques, illustration of geometric principles, and the collecting and organizing of data are possible study activities.

Within the field of earth science, samples of igneous, sedimentary, and metamorphic rocks, and commercial building stones could be deployed on the site. Benchmarks could indicate the elevation, latitude, longitude, section, and township. A sundial could provide learning inputs throughout the four seasons. A large compass could be displayed. The soil profile in areas could indicate erosion and techniques to prevent it. The mounds of earth could contain granite, lava, basalt, diorite, syenite (all igneous rocks), shale, sandstone, conglomorate, limestone with and without fossils, dolomite (all sedimentary rocks), marble, slate, gneiss, quartizite, and schist (all metamorphic rocks).

The outdoor area can provide space in which students may sit while studying, sketching, or painting. Art projects could profit from the motivation provided by plants, rocks, and fossils.

In chemistry, the area would provide an opportunity for testing for acids and bases using soil samples.

The study of conservation is enhanced by the possibilities of different climactic areas providing the opportunity to study erosion, the pollution of the area, and the care of different types of plants.

A variety of plant life should be provided in different areas to illustrate different leaf arrangements, types which develop at different times of the year and types which have different growth rates. In the arid area various cacti could be grown. Plants could be selected that attract different kinds of insects. There might be a place for some type of algae, and a small area possibly could be set aside to grow radishes.

In the study of biology, the trees functioning as windbreaks could create a micro-climate, in which observational skills could be developed by studying and recording changes during the year.

The outdoor classroom could provide a base for weather study with a weather station for recording and studying weather conditions. Map reading, map construction, scaling, and surveying are possible activities.

The above suggestions are only some possible means of correlating the outdoor classroom with normal instructional activities.

PROBLEM OPPORTUNITY SKETCH PLAN BUDGET PROGRAM

PUEBLO REGIONAL PLANNING COMMISSION

ENVIRONMENTAL STUDY AREA PROTOTYPE

IDEA SKETCH NO. **4**

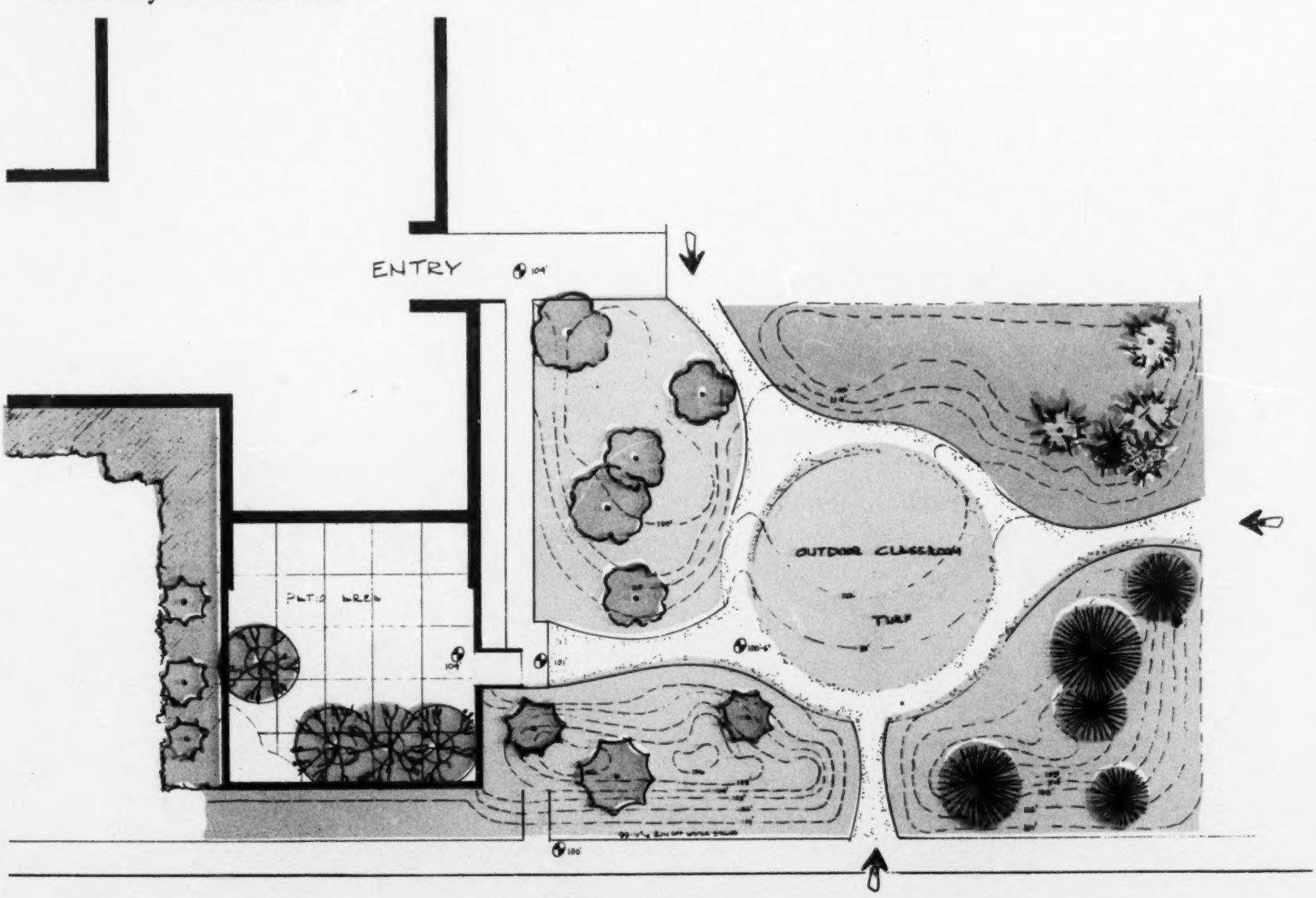
PROPOSED PLAN, OUTDOOR EDUCATION CENTER, IRVING SCHOOL

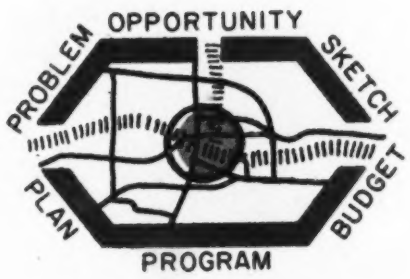
"If Homo Sapiens is to continue as the dominant species of life on Earth, modern man must come to a better understanding of the Earth and of what he has been doing to it."

.... ***Paul and Anne Ehrlich,***
Population, Resources, Environment

In the plan for an Outdoor Education Center for Irving School, an outdoor classroom is surrounded by areas for arid, semi-arid, foothills, and mountain plant life, rocks and soils. The raised patio area provides a connection between the outdoor center and the school building.

This center is designed to provide experiences to increase the awareness of the environment among elementary school students.





PUEBLO REGIONAL PLANNING COMMISSION

ENVIRONMENTAL STUDY AREA PROTOTYPE

IDEA SKETCH NO. **4**

THE PLAN PROCESS

The role of the Pueblo Regional Planning Commission staff in the formulation of this idea sketch was that of coordination and production. This involved the application of landscaping and outdoor study area principles (devised in consultation with many individuals and groups) to a specific problem area, Irving Elementary School.

The landscaping of school grounds in Pueblo was earlier identified as Pueblo Beautiful Association's main goal for 1971. To achieve this, the members of the Landscaping Committee, headed by Mr. Robert Delzell, Soil Conservationist with the Soil Conservation Service in Pueblo, were working jointly with the Outdoor Education Committee of School District 60. This school committee, chaired by Mr. Robert F. Moore, is composed of teachers and community leaders who are interested in the educational possibilities of the outdoor environment.

Throughout the United States each year on Arbor Day, Chevron Oil Corporation plans three or four ceremonies to promote better conservation practices. In March, the Pueblo Beautiful Association was contacted by Mr. C. O. Lynch of Chevron Oil Corporation. Mr. Lynch and two other Chevron executives set up a meeting with the Pueblo Beautiful Association members to discuss the possibility of a $500 grant from Chevron for a beautification project in Pueblo. At the meeting, Chevron designated Pueblo as one of the grant recipients for 1971. Pueblo Beautiful Association would receive $750 for landscaping at Irving Elementary School. Irving School was selected because of the interest shown by the school in the potentials of outdoor education as well as several other factors.

The Chevron executives, Mrs. Gladys Comi, who is President of the Pueblo Beautiful Association, and Mr. Delzell held another meeting to discuss methods to implement a landscaping-learning lab plan. The Soil Conservation Service had drawn earlier a basic plan for the school. After another meeting with the Maintenance Department of School District 60 and Mr. Ernest Welch, Director of Elementary Education, Mr. Charles Fenimore, landscape architect and Pueblo Beautiful Association Board member, was asked to develop the basic ideas into a total landscaping plan for the school. This development plan would include windbreaks and indigenous materials to landscape and beautify the school ground with a major emphasis on the outdoor environmental study area.

At this point, the assistance of the Outdoor Education Committee was solicited; the teachers of the school and their plans for a study area were considered; and the Irving School PTA met to plan for raising additional funds. The Maintenance Department of School District 60 decided to contribute at least $500 for the project to cover costs for materials and labor for the water line and sprinklers and dirt to be brought into the area. Mr. George Williams, Jr., of the Parks Department and member of Pueblo Beautiful Association, commented on the plan and suggested improvements, such as night-lighting. Mr. Al Blomquist, Director of Pueblo Regional Planning Commission and Board member of Pueblo Beautiful Association, suggested a basic concept for the educational area so that it would include arid, semi-arid, plains and mountain regions surrounding an outdoor classroom with appropriate teaching aids for this type of project.

The format developed through the plan process at Irving School could easily be adapted for use by other schools interested in environmental learning and landscape improvement. At least two other schools have now begun fund raising drives to finance a similar project.